

## A REVISION OF CENTRAL AFRICAN *TRABEA* (ARANEAE, LYCOSIDAE) WITH THE DESCRIPTION OF TWO NEW SPECIES FROM MALAWI AND A REDESCRIPTION OF *T. PURCELLI*

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**ABSTRACT.** The central African representatives of the genus *Trabea* are revised. *Trabea straeleni* (Roewer 1960) is revalidated as a good species and redescribed. *Trabea heteroculata* Strand 1913 is redescribed, and two new species from Malawi are added: *Trabea nigristernis* new species and *Trabea setula* new species. For comparison, a related southern African species, *Trabea purcelli* Roewer 1951, is redescribed. Some notes on the southern African *Trabea ornatipalpis* Russell-Smith 1982 are given together with a short zoogeographical discussion of the genus *Trabea* as a whole.

Simon (1876) created the genus *Trabea* for the Mediterranean species *paradoxa* (note correct spelling, not *Trabaea*; cf. Roewer 1954; Platnick 1989, 1993). The genus was revised by Russell-Smith (1982) to whose paper I refer for discussions at the generic and subfamilial level and for a diagnosis of the genus. Nine valid species were retained within *Trabea* at that time, eight from sub-Saharan Africa and one from the Mediterranean region. Snazell (1983) discovered a tenth species in southern Spain, which he named *cazorla*. This species was later also recorded from northern Spain (Barrientos 1985) and northern Africa (Alderweireldt et al. 1992).

From central Africa, two species were known. *Trabea straeleni* (Roewer 1960, sub *Trabaeosa*) was described from Congo (Zaire) but synonymized by Russell-Smith (1982) with the South African *T. purcelli* (Roewer 1951, sub *Trabaeosa*). The study of further material indicates that this synonymy, which was based on female material only, was incorrect. Therefore *T. straeleni* is revalidated here. Besides this, *T. heteroculata* Strand 1913 is known from Ruanda and Tanzania. While studying a spider collection from Malawi (deposited in the Royal Museum of Central Africa, Tervuren, Belgium), two new species of *Trabea* were discovered. They are described here within the framework of a revision of all known central African species. Besides this, further records are added to the distribution of both *T. straeleni* and *T. heteroculata*.

Abbreviations used in the text are as follows: MRAC = Royal Museum of Central Africa (R. Jocqué), NHRS = Swedish Museum of Natural History (T. Kronstedt), PCMA = Private collection M. Alderweireldt, SAM = South African Museum (M.A. Cochrane), SMF = Senckenberg Museum Frankfurt (M. Grasshoff), ZMB = Zoological Museum Berlin (Sh. Nawai), CW = carapace width in mm, CL = carapace length in mm, TL = total length in mm. All measurements indicate mean value with range between brackets.

### TAXONOMY

*Trabea* Simon 1876: 357. Type species  
*Trabea paradoxa* Simon by monotypy.

*Trabea*: Russell-Smith 1982: 70.

*Trabea straeleni* (Roewer 1960) (revalidated)  
Figs. 1–3

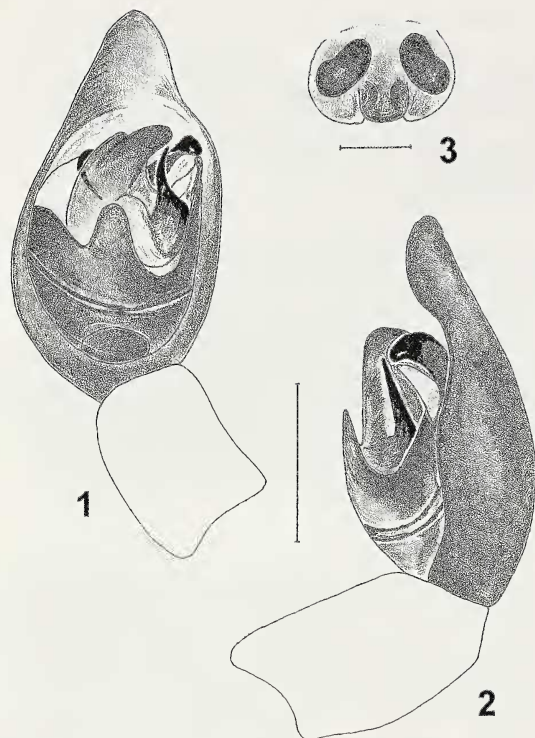
*Trabaeosa straeleni* Roewer 1960: 585, fig. 331.

*Trabaea straeleni*: Russell-Smith 1982: 74, fig. 3,  
fig. 11D (sub *T. purcelli*)

*Pseudevippa bipunctata* Roewer 1959: 204, fig.  
107; Alderweireldt 1991: 379 (see remark under  
*T. purcelli*)

**Type material.**—**CONGO (ZAIRE):** Lusinga hill, 1810 m, 16 July 1947, 1 ♀ holotype, (Mission De Witte) (MRAC 139.442) (examined). Kaziba, 1140 m, 24 February 1948, 2 ♀ paratypes (Mission De Witte) (MRAC 139.413) (examined). Lusinga, 1810 m, 3 ♂ 2 ♀ paratypes (Mission De Witte) (MRAC 139.444) (examined).

**Remark.**—Holotype and paratypes of *straeleni* were discovered in the MRAC col-



Figures 1-3.—*Trabea straeleni*. 1, Male palp, ventral view; 2, Male palp, lateral view; 3, Epigynum. Scales: Figures 1-2 = 0.5 mm, Figures 3 = 0.1 mm.

lection. They are labelled as such most probably by Roewer. Apparently, Russell-Smith (1982) did not examine this type material. The lectotype he designated from material in SMF is here considered to be no longer valid.

**Diagnosis.**—Similar to *Trabea purcelli* Roewer but darker with a more conspicuous black fringe of hairs on male palp; terminal apophysis larger; lateral part of tegular apophysis more curved, and anterior edge of tegular apophysis with clear groove. Each set of spermathecae in a compact group.

**Description.**—*Male*: ( $n = 2$ ) CW = 1.09 (1.11–1.07), CL = 2.80 (2.78–2.82), TL = 5.18 (5.24–5.12). Carapace dark brown with a pale median band and two continuous pale lateral bands. Sternum yellow. Chelicerae yellow with short, black stripes at its base. Clypeus mainly yellow. Abdomen with dorsal side pale brown and with two longitudinal, black stripes. Ventral side mainly yellow. Spinnerets yellow. Legs yellow. Femur I with two propapical spines and dorsally with two large spines beside a smaller apical one. Tibia I with

four pairs of ventral spines and an additional apical pair. Metatarsus I with three pairs of ventral spines and an additional apical pair. Palp: femur mainly yellow but darker ventrally. Patella proximal half yellow, distal half darker. Tibia and tarsus dark brown. Tibia with long black hairs laterally. Hairs almost as long as diameter of tibia.

*Female*: ( $n = 2$ ) CW = 1.82 (1.68–1.96), CL = 2.80 (2.66–2.94), TL = 5.74 (5.60–5.88). Carapace paler than in male with broad pale median band and two continuous lateral bands. Sternum yellow. Chelicerae mainly yellow, with short black basal stripes. Clypeus yellow. Abdomen with dorsal side pale brown and with darker pattern of two longitudinal stripes. Ventrally mainly yellow. Spinnerets yellow. Legs light brown to yellow. Femora often with dark lateral stripes. Tibiae and metatarsi often with darker spots. Ventral spination of tibia and metatarsus I as in male. Palp yellow to light brown.

**Other material examined.**—**CONGO (ZAIRE)**: Lusinga, 1810 m, 16 July 1947, 1♂ (Mission De Witte) (MRAC 139.443). Upemba National Park, 1♂ (MRAC 139.896, sub *Pseudevippa bipunctata*). Upemba National Park, 2♂ (SMF, sub *Pseudevippa bipunctata*). **RUANDA**: Butare, campus de l'INRS, grassland, 6 November 1985, 1♂ (Jocqué, Nsengimana & Michiels) (MRAC 164.931). **MALAWI**: Viphya Mountains, Chikangawa, young pine plantation, September–October 1977, 4♂ (R. Jocqué) (MRAC 153.578). **ETHIOPIA**: 10 km E of Adis Ababa, grassland, *Pennisetum* tussocks, 2500 m, 8 June 1986, 2♂2♀ (A. Russell-Smith) (PCMA 815).

**Distribution.**—Congo (Zaire), Ruanda, Malawi and Ethiopia.

#### *Trabea purcelli* Roewer 1951

Figs. 4–6

*Trabaea lineata* Purcell 1903: 130, fig. 20

*Trabaea purcelli* Roewer 1951: 442 (nom. nov.);

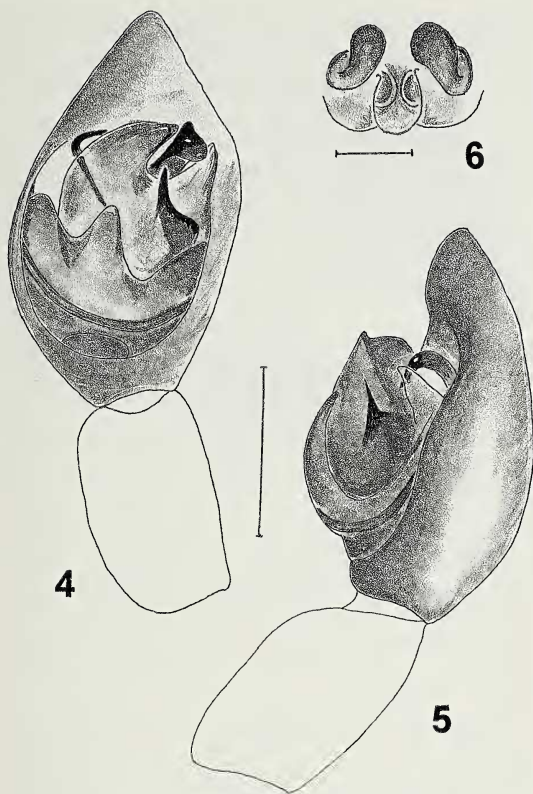
Russell-Smith 1982: 74, fig. 11c

*Trabaeosa purcelli*: Roewer 1954: 297; Roewer 1960: 588, fig. 332.

**Type material.**—**SOUTH AFRICA**: Cape, Kogmansloof, Ashton side, 27 August 1900, 1♀ holotype (W.F. Purcell) (SAM 6266) (examined).

**Remarks.**—Originally described by Purcell (1903) as *T. lineata* but due to preoccupation renamed *purcelli* by Roewer (1951). *Pseudevippa bipunctata* Roewer 1959 was earlier synonymized with *T. purcelli* (Alderweireldt





Figures 4–6.—*Trabea purcelli*. 4. Male palp, ventral view; 5, Male palp, lateral view; 6, Epigynum. Scales: Figures 4, 5 = 0.5 mm, Figure 6 = 0.1 mm.

1991). Due to the revalidation of *T. straeleni*, it became clear that *P. bipunctata* is in fact a junior synonym of the latter and not of *T. purcelli*.

**Diagnosis.**—Paler than *straeleni* with spermathecae further apart in a less compact group and median septum almost semi-circular. Terminal apophysis relatively smaller. Lateral part of tegular apophysis shorter. Anterior edge of tegular apophysis with poorly developed groove. Palpal cymbium and tibia less hairy.

**Description.**—*Male*: CW = 1.65, CL = 2.60, TL = 5.00. Carapace pale brown with a yellow median band and two continuous broad pale lateral bands. Sternum yellow with darker parts along sides. Chelicerae yellow, with darker longitudinal stripes. Clypeus mainly yellow. Abdomen faded, yellow in general, pattern probably not much different from other species. Spinnerets yellow. Legs yellow, the darker mottlings probably faded.

Tibia I with three pairs of ventral spines and an additional apical pair. Metatarsus I with three pairs of ventral spines and an additional apical pair. Palp yellow.

*Female*: (Coloration completely faded in alcohol; difficult to evaluate) ( $n = 2$ ). CW = 1.95 (1.90–2.00), CL = 2.90 (2.80–3.00), TL = 5.40 (4.90–5.90). Carapace pale brown with yellow median band and two continuous lateral bands. Sternum yellow. Chelicerae yellow, with darker longitudinal stripes. Clypeus yellow. Abdomen faded, yellow in general, pattern probably not much different from other species. Spinnerets yellow. Legs yellow, no darker spots visible, probably faded. Ventral spination of tibia and metatarsus I as in male. Palp yellow.

**Other material examined.**—**SOUTH AFRICA**: Great Winterhoek Mountains, 4800–4900 feet, 17 November 1916, 1♂ (R.W. Tucker) (SAM 2776, sub *Trabea lineata*). Clanwilliam, November 1899, 1♀ (R.M. Lightfoot) (SAM 5880, sub *Trabea lineata*). Matroosberg mountains, 3500–4500 feet, 20 January 1917, 1♀ (R.W. Tucker) (SAM 2988, sub *Trabea lineata*). Waterfall mountains, November 1902, 1♀ (R.M. Lightfoot) (SAM 12388, sub *Trabea lineata*).

**Distribution.**—South Africa, Cape Province.

#### *Trabea heteroculata* Strand 1913

Figs. 7–9

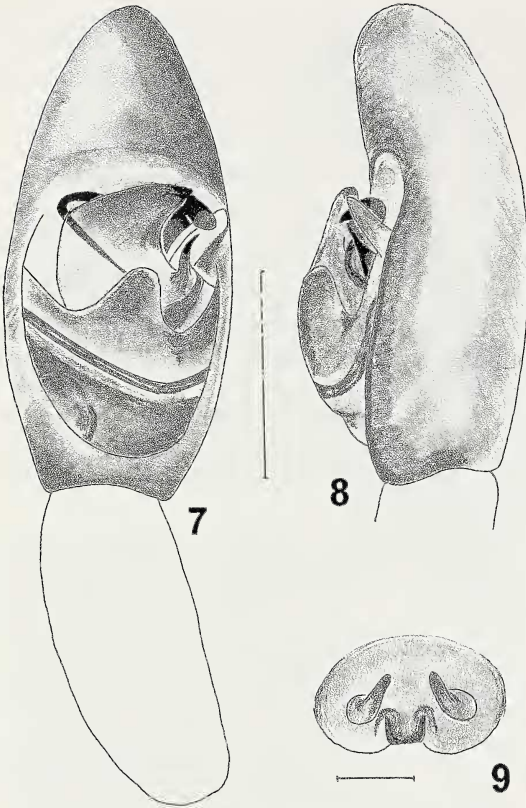
*Trabea heteroculata* Strand 1913: 456; Lessert 1926: 346, fig. 10; Caporiacco 1949: 338; Russell-Smith 1982: 84, fig. 8.

*Trabeosa heteroculata* Roewer 1954: 297; Roewer 1960: 583, fig. 330.

**Type material.**—**RUANDA**: Rugege forest, 1800 m, 20 August 1907, 1♀ holotype (Schubotz) (ZMB 10523) (examined).

**Diagnosis.**—Smaller and paler species than the others considered here. Vulva with spermathecae typically overlapping with one part oriented to ventral side. Cymbium of male rounded without lateral dent and with many flattened setae on tip. Palpal tibia short. Terminal apophysis relatively weak.

**Description.**—(Coloration somewhat faded in alcohol). *Male*: CW = 1.55, CL = 2.40, TL = 5.00. Carapace pale brown with broad pale median band and two continuous broad pale lateral bands. Sternum yellow with some faint darker spots near coxae. Chelicerae yellow with longitudinal, black stripes. Clypeus



Figures 7-9.—*Trabea heteroculata*. 7, Mirrored view of right male palp, ventral view; 8, Mirrored view of right male palp, lateral view; 9, Epigynum. Scales: Figures 7, 8 = 0.5 mm, Figure 9 = 0.1 mm.

yellow. Abdomen with dorsal side pale brown to yellow and with some black mottling forming two longitudinal stripes. Ventral side mainly yellow. Spinnerets yellow. Legs yellow, hardly any darker markings visible. Femur I with two pro-apical spines. Tibia I with three pairs of ventral spines and an additional apical pair. Metatarsus I with three pairs of ventral spines and an additional apical pair. Palp mainly yellow with some faint darker spots.

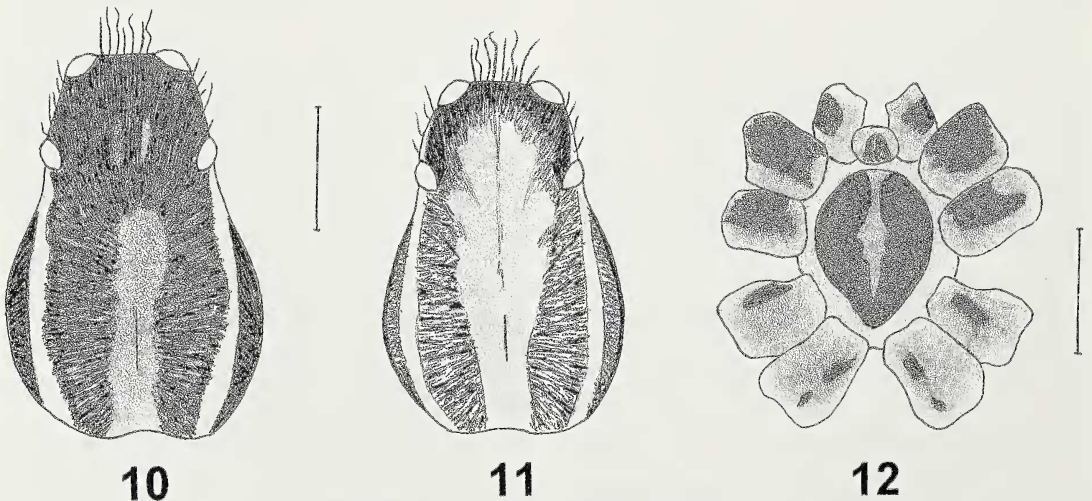
*Female:* ( $n = 2$ ) CW = 1.75 (1.70–1.80), CL = 2.65 (2.60–2.70), TL = 4.85 (4.80–4.90). Carapace pale brown with broad pale median band and two continuous broad lateral bands. Sternum pale yellow. Chelicerae yellow, mostly with darker streaks. Clypeus yellow. Abdomen with dorsal side pale brown to yellow and with two longitudinal darker stripes, ventrally pale yellow. spinnerets yellow. Legs yellow with darker mottlings. Ventral spination of tibia and metatarsus I as in male. Palp yellow to light brown, without darker markings.

**Other material examined.**—TANZANIA: Kilimanjaro, Kiboscho, 3000 m, 1♂4♀ (Y. Sjöstedt) (NHRS). KENYA: Mount Kenya, July 1975, 1♀ (R. Bosmans) (MRAC 161.774).

**Distribution.**—Ruanda, Tanzania and Kenya.

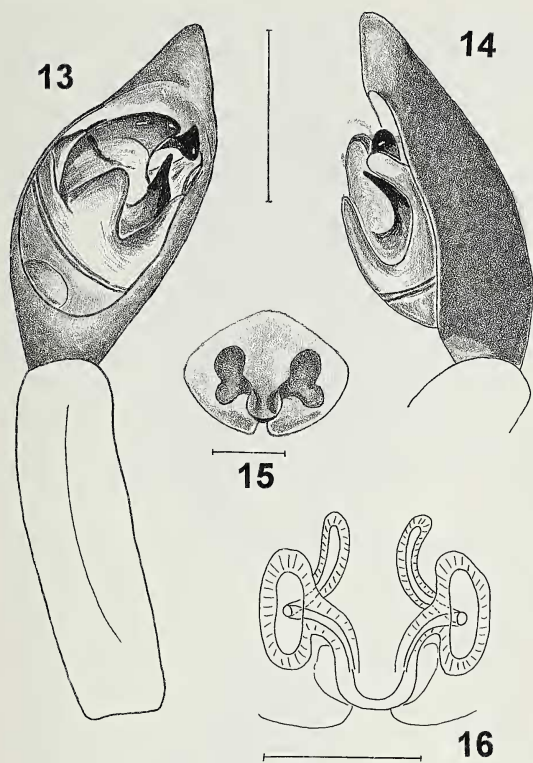
*Trabea nigristernis* new species  
Figs. 10–16

**Type material.**—MALAWI: Mount Mu-



Figures 10-12.—*Trabea nigristernis* new species. 10, Male carapace, dorsal view; 11, Female carapace, dorsal view; 12, Male sternum. Scale = 1.0 mm.





Figures 13–16.—*Trabea nigristernis* new species. 13, Male palp, ventral view; 14, Male palp, lateral view; 15, Epigynum; 16, Vulva cleared. Scales: Figures 13, 14 = 0.5 mm, Figures 15, 16 = 0.1 mm.

lanje, Lichenya plateau, 2000 m, grassland in firebreak, 9–22 November 1981, 1 ♂ holotype (R. Jocqué) (MRAC 206.674). Chelinda, 2300 m, December 1981, 1 ♀ paratype (R. Jocqué) (MRAC 156.201).

**Diagnosis.**—Coloration similar to *Trabea heterocolata* but with dark sternum in male and without white hairs on cymbium. Palpal tibia long, somewhat curved and flattened on one side. Also resembling *Trabea ornatipalpis* Russell-Smith 1982 but shape of tegular apophysis, lateral part of tegular apophysis and terminal apophysis as well as vulva clearly different.

**Description.**—*Male:* ( $n = 5$ ) CW = 1.99 (1.80–2.20), CL = 3.04 (2.70–3.30), TL = 5.66 (5.30–6.30). Carapace dark brown with pale median band and two continuous pale lateral bands. Lateral bands covered with white hairs becoming denser anteriorly. Sternum dark with pale median stripe not reaching posterior margin. Chelicerae yellow with longi-

tudinal, black stripes. Clypeus yellow with black markings. Dorsal side of abdomen brown with some black mottling and two longitudinal, black stripes; ventral side brown. Spinnerets blackish with yellow base. Legs yellow, some darker markings only on ventral and lateral side of femur I and II. Femur I with two pro-apical spines and dorsally with two large spines beside a smaller apical one. Tibia I with three pairs of ventral spines and an additional apical pair. Metatarsus I with two pairs of ventral spines and an additional apical pair. Palp femur yellow with darker base. Tibia yellow, patella and tarsus mainly black.

*Female:* ( $n = 5$ ) CW = 2.04 (1.90–2.30), CL = 3.14 (3.00–3.50), TL = 6.12 (5.50–6.70). Carapace much paler than in male with broad pale median band and two continuous lateral bands covered with pale white hairs becoming denser in front. Sternum pale yellow with two darker stripes along sides. Chelicerae yellow, mostly with darker streaks. Clypeus yellow. Dorsal side of abdomen pale brown with two longitudinal stripes; ventrally pale with darker brown spots. Spinnerets yellow. Legs light brown to yellow. Femur I and patella I yellow with many darker brown markings. Tibia I and metatarsus I dark brown and tarsus I yellow. Ventral spination of tibia and metatarsus I as in male. Spines long and overlapping. Palp yellow to light brown, usually with darker spots and stripes.

**Other material examined.**—**MALAWI:** Mount Mulanje, Lichenya plateau, 2000 m, grassland and firebreak, 9–22 November 1981, 1 ♂ 1 ♀ (R. Jocqué) (MRAC 156.309). Mulanje path, 1850 m, 19 November 1981, 1 ♀ (R. Jocqué) (MRAC 156.657). Chilemba hill, 2300–2350 m, 20 November 1981, 1 ♂ (R. Jocqué) (MRAC 156.673). Chilemba hill, grassland and firebreak, 2000 m, 9–24 November 1981, 2 ♂ (R. Jocqué) (MRAC 155.833). Chilemba hill, CCAP hut, 2000 m, 5–25 November 1981, 1 ♀ (R. Jocqué) (MRAC 155.792). Linje pools, wet grassland, 2000 m, 5–22 November 1981, 1 ♂ (R. Jocqué) (MRAC 155.846). Linje river, Cliffortia vegetatie, 5–23 November 1981, 1 ♂ (R. Jocqué) (MRAC 155.750). Mount Mulanje, Chisepo shelter, 2120 m, 13 November 1981, 1 ♀ (R. Jocqué) (MRAC 206.675). Nyika plateau, road to Kasaramba, 2350 m, grassland, 13 December 1981, 2 ♀ (R. Jocqué) (MRAC 156.691). Dambo, 2350 m, circular drive, 12 December 1981, 1 ♂ 1 ♀ (R. Jocqué) (MRAC 156.841). Chelinda, 2300 m, 7 December 1981, 2 ♀ (R. Jocqué) (MRAC 156.154). Chelinda, 2300 m, December 1981, 1 ♂ (R. Jocqué) (MRAC

156.217). Chelinda, 2300 m, by dam nr. 1, 3 December 1981, 1♂ (R. Jocqué) (MRAC 155.906). Lake Kaulime, 2200 m, 6–19 December 1981, 1♂ (R. Jocqué) (MRAC 156.018). Lake Kaulime, 2200 m, 6–19 December 1981, 1♂ (R. Jocqué) (MRAC 155.888). Dembo river, 2100 m, gradient from river to dry grassland, 5–20 December 1981, 1♂ (R. Jocqué) (MRAC 156.337).

**Etymology.**—The species name refers to the mainly dark sternum of the male which is unusual within the genus.

**Distribution.**—Malawi.

*Trabea setula* new species

Figs. 17–23

**Type material.**—MALAWI: Nyika plateau, Chelinda, 2300 m, burned grassland, 7–19 December 1981, 1♂ holotype (R. Jocqué) (MRAC 155.765). Chelinda, 2300 m, 7–19 December 1981, 5♂ paratypes (R. Jocqué) (MRAC 155.870).

**Diagnosis.**—Recognized by the row of small spines below posterior eyes on the lateral margin of cephalon.

**Description.**—*Male:* ( $n = 5$ ) CW = 1.58 (1.50–1.65), CL = 2.28 (2.10–2.40), TL = 4.56 (4.30–4.90). Carapace dark brown with a broad pale parallel-sided median band and broad yellow lateral bands. Margin with fine black line. Some small black spines within pale yellow lateral bands. Row of 9–10 small, black spines below posterior eyes on lateral side of cephalon. Sternum yellow with small dark spots along coxae. Chelicerae yellow with brown stripes. Clypeus yellow. Abdomen with dorsal side brown and pale brown median band and two longitudinal rows of black spots. Ventrally brown. Spinnerets pale brown. Legs yellow with dark spots especially on ventral side of coxae and femora. Tibia I with three pairs of ventral spines and an additional apical pair. Metatarsus I with three pairs of ventral spines. Palp femur mainly yellow with dark inner and outer brown stripes. Inner brown stripe on femur with green to blue iridescence. Patella mainly dark but dorsally yellow. Tibia and tarsus black thickly covered with long black hairs. Tibia very short in comparison to many other *Trabea* species, including *nigristernis*.

*Female:* ( $n = 2$ ) CW = 1.45 (1.40–1.50),

CL = 2.35 (2.30–2.40), TL = 5.20 (4.90–5.50). Carapace pale brown with very broad yellow median and lateral bands. Margin with fine black stripe. Many short black spines within yellow lateral bands. Subocular row of short spines clearly present on lateral side of cephalon. Spines, however, white in contrast to male. Sternum yellow with darker spots along coxae. Chelicerae yellow with brown stripes. Clypeus mainly yellow. Abdomen with dorsal side pale brown and broad yellow median band and darker spots. Ventral side mainly yellow. Spinnerets yellow. Legs yellow with dark spots. Tibia I ventrally with three pairs of spines and one apical pair. Metatarsus I with three pairs of ventral spines. Palp yellow.

**Other material examined.**—MALAWI: Nyika plateau, Chelinda, burned grassland, 7–10 December 1981, 1♂ (R. Jocqué) (MRAC 156.759). idem, 2300 m, 7–19 December 1981, 1♂ (R. Jocqué) (MRAC 155.943). idem, 2300 m, 7–19 December 1981, 2♂2♀ (R. Jocqué) (MRAC 155.738). idem, 2300 m, 7–19 December 1981, 1♂ (R. Jocqué) (MRAC 170.722). idem, 2300 m, 7–19 December 1981, 2♂ (R. Jocqué) (MRAC 206.676). idem, 2300 m, Cupressus plantation, 5 December 1981, 1♂ (R. Jocqué) (MRAC 156.228). idem, 2300 m, burned grassland in 1980, 7–19 December 1981, 1♀ (R. Jocqué) (MRAC 206.677).

**Etymology.**—The species name refers to the row of small setae laterally on the cephalon below the posterior eyes.

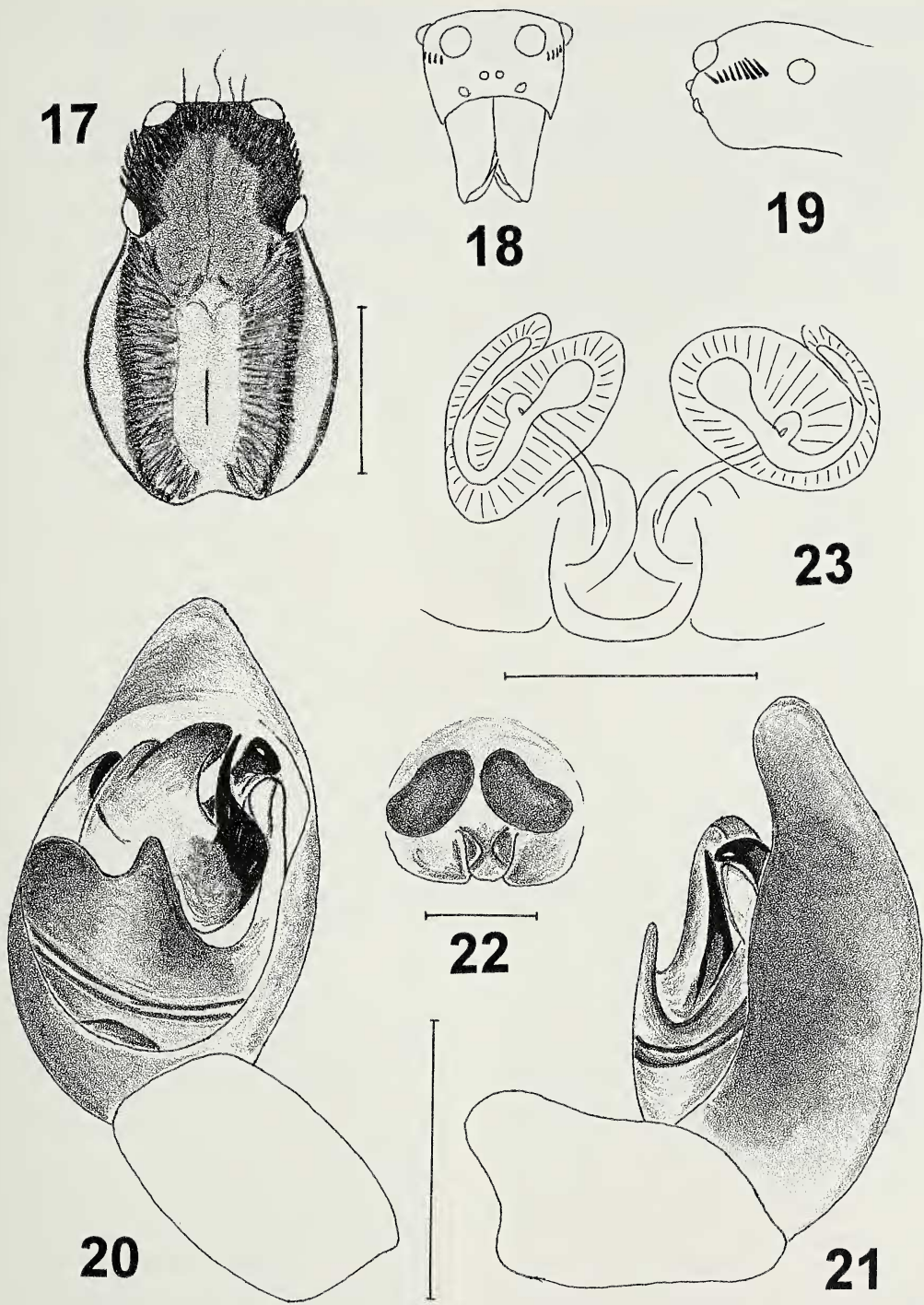
**Distribution.**—Malawi.

*Trabea ornatipalpis* Russell-Smith 1982

**Material examined.**—SOUTH AFRICA: Cape Town, Table Mountain, summit, 30 March 1916, 1♀ (R.W. Tucker) (SAM 2474). Cape Town, Table Mountain, above Casteels poort, 27 February 1915, 1 subad. ♀ (R.M. Tucker) (SAM 910).

The epigynum of the female in SAM corresponds to that of *T. ornatipalpis* of which only females were known from Natal. These were matched with one male from Table Mountain in the Cape Province. The female from Table Mountain suggests that Russell-Smith (1982) was correct when matching males and females originally collected from very different localities.





Figures 17–23.—*Trabea setula* new species. 17, Male carapace, dorsal view; 18, Cephalon, frontal view, showing position of row of small spines; 19, Cephalon, lateral view, showing position of row of small spines; 20, Male palp, ventral view; 21, Male palp, lateral view; 22, Epigynum; 23, Vulva cleared. Scales: Figure 17 = 1.0 mm, Figures 20, 21 = 0.5 mm, Figures 22, 23 = 0.1 mm.

KEY TO CENTRAL AFRICAN *TRABEA* SPECIES, INCLUDING THE  
SOUTHERN *PURCELLI*

1a.	Males .....	2
1b.	Females .....	6
2a.	Anterior edge of tegular apophysis without conspicuous groove (Figs. 7, 13); cymbium quite elongated (Figs. 7, 13) with group of modified hairs (flattened setae) on tip; palpal tibia without fringe of black hairs .....	3
2b.	Anterior edge of tegular apophysis with groove (Figs. 1, 4, 20) (most clearly visible in mesal view); cymbium shorter (Fig. 1) without group of modified hairs (flattened setae) on tip; palpal tibia usually with fringe of black hairs .....	4
3a.	Larger species; cymbium gradually narrowed in apical third (Fig. 13); palpal tibia as long as or longer than cymbium (Fig. 13), somewhat curved and flattened on one side; terminal apophysis strongly developed; sternum with large proportion dark (Fig. 12) . . . <i>nigristernis</i> new species	
3b.	Smaller species; cymbium blunt, hardly narrowed in apical third (Fig. 7); palpal tibia shorter than cymbium (Fig. 7); terminal apophysis smaller; sternum mainly yellow .....	<i>heteroculata</i>
4a.	Carapace on lateral side below posterior lateral eyes with short row of conspicuous black spines (Figs. 18, 19) .....	<i>setula</i> new species
4b.	Carapace without such a short row of spines .....	5
5a.	Lateral part of tegular apophysis strong and curved; anterior edge of tegular apophysis with deep groove (Figs. 1, 2); central Africa .....	<i>straeleni</i>
5b.	Lateral part of tegular apophysis relatively small and straight; groove of anterior edge of tegular apophysis inconspicuous, poorly developed (Figs. 4, 5); southern Africa .....	<i>purcelli</i>
6a.	Carapace on lateral side below posterior lateral eyes with short row of pale white but conspicuous spines (cf. Figs. 18, 19); spermathecae close to each other (Fig. 23); epigynal septum rounded (Fig. 22) .....	<i>setula</i> new species
6b.	Carapace without such a short row of spines; spermathecae usually further apart; epigynal septum rounded to square .....	7
7a.	Epigynal septum almost square, with conspicuous edges (Fig. 9); medial part of spermathecae directed ventrad (Fig. 9) .....	<i>heteroculata</i>
7b.	Epigynal septum rounded; medial spermathecae not directed ventrad .....	8
8a.	Epigynal septum with clear edges, not semi-circular; each set of spermathecae forming a compact group in the uncleared epigynum .....	9
8b.	Epigynal septum smoothly rounded, almost semi-circular (Fig. 6); each set of spermathecae further apart in a less compact group (Fig. 6) .....	<i>purcelli</i>
9a.	Epigynum as in Fig. 15; sternum with some darker parts along sides . . . <i>nigristernis</i> new species	
9b.	Epigynum as in Fig. 22; sternum normally completely yellow .....	<i>straeleni</i>

ZOOGEOGRAPHY

The genus *Trabea* seems to reach its highest diversity in South Africa with seven species occurring there. Besides this, two species are quite widespread in the Mediterranean area, north of the Sahara. Both these regions are amongst the better surveyed areas in Africa, and this might bias certain zoogeographical interpretations. In central and eastern Africa, four species are now known, two of which seem restricted to Malawi. Although extensive collections exist for instance from Congo (Zaire), only one *Trabea* species is known from that country.

The diversity observed in Malawi is striking but not new. In several other spider families and other arthropod groups, the mountain forest relicts seem to contain a special fauna. The new *T. setula* found in Malawi, Nyika

plateau is clearly closely related to *T. purcelli* known from the Cape. This again might be an indication of the historical connection between forested areas of both regions. However, there seems to be no reason why the genus should not be present in other geographically intermediate countries such as Zimbabwe, Botswana or Mozambique. As far as can be judged from the very poor biological data, most species are in no way restricted to forests (cf. Russell-Smith 1982). Both new species from Malawi are so far restricted to montane areas, as is the case for *T. ornatipalpis* from South Africa and *T. heteroculata* from Ruanda, Malawi and Tanzania.

CHECKLIST OF PALAEARCTIC AND  
AFROTROPICAL *TRABEA* SPECIES

The following valid species of *Trabea* are now known from the African continent and



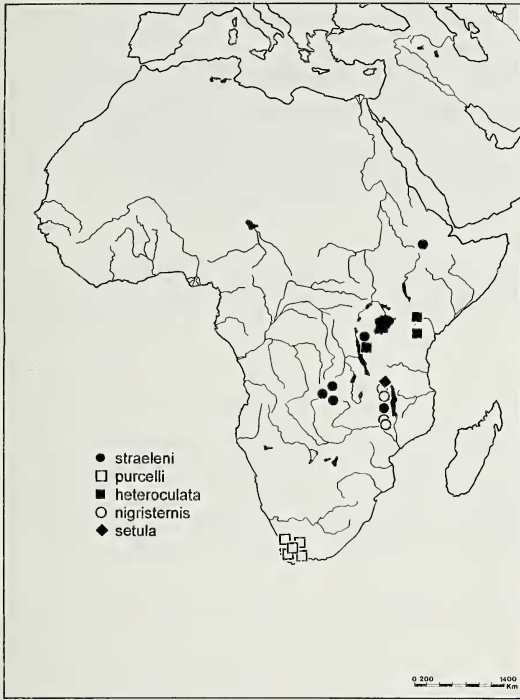


Figure 24.—Distribution of the *Trabea* species occurring in central Africa and of *T. purcelli* from South Africa.

the Mediterranean region: *cazorla* Snazell 1983 (Spain and north Africa, ♂ & ♀ known), *heteroculata* Strand 1913 (Ruanda, Tanzania and Kenya, ♂ & ♀ known), *natalensis* Russell-Smith 1982 (Natal, South Africa, only ♂ known), *nigriceps* Purcell 1903 (Cape, South Africa, ♂ & ♀ known), *nigristernis* new species (Malawi, ♂ & ♀ known), *ornatipalpis* Russell-Smith 1982 (Natal and Cape, South Africa, ♂ & ♀ known), *paradoxa* Simon 1876 (Mediterranean Europe and north Africa, ♂ & ♀ known), *purcelli* Roewer 1951 (Cape, South Africa, ♂ & ♀ known), *rubriceps* Lawrence 1952 (Natal and Cape, South Africa, only ♀ known), *setula* new species (Malawi, ♂ & ♀ known), *straeleni* Roewer 1960 (Congo (Zaire), Ruanda, Malawi and Ethiopia, ♂ & ♀ known), *unicolor* Purcell 1903 (Cape, South Africa, only ♂ known) and *varia* Purcell 1903 (Cape, South Africa, ♂ & ♀ known).

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